



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/690,207	10/17/2000	Jean Francois Le Pennec	FR9-1999-0079 US1	2162

7590

04/05/2004

BRACEWELL & PATTERSON  
INTELLECTUAL PROPERTY LAW  
P. O. BOX 969  
AUSTIN, TX 78767-0969

EXAMINER

WILSON, ROBERT W

ART UNIT

PAPER NUMBER

2661

DATE MAILED: 04/05/2004

7

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/690,207

**Applicant(s)**

LE PENNEC ET AL.

**Examiner**

Robert W Wilson

**Art Unit**

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2000.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-9, 11-13 and 15-19 is/are rejected.
- 7) ☒ Claim(s) 4, 10, 14 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 2661

### DETAILED ACTION

**1.0** The application of Jean Francois Le Pennec et. al. entitled "METHOD AND SYSTEM FOR ESTABLISHING A VIRTUAL PATH CAPABILITY IN A FRAME RELAY NETWORK" filed on 10/17/2000 and claiming foreign priority based upon EPO 99480112.4 was examined. Claims 1-20 are pending.

#### *Claim Rejections - 35 USC § 103*

**2.0** The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**3.0** **Claims 1-3, 5-9, 11-13, & 15-19** are rejected under 35 U.S.C. 103(a) as being

unpatentable over Cherukuri et. al. (U.S. Patent No.; 6,125,119) in view of Lorrain et. al. (U.S.

Patent No.: 6,636,512 B1).

Referring to **Claim 1**, Cherukuri teaches: A method for establishing a virtual path within a frame relay network wherein frames are transmitted over a plurality of virtual circuits from a first switching node to a second switching node (20 or first node transmits to 22 or second node per Fig 1)

Transmitting by said first switching node to said second switching node (20 or first node transmits to 22 or second node per Fig 1), a first control message requesting a virtual path be established (control message per col. 5 line 5 col. 6 line 44 or Table 3), and specifying two or more virtual circuits to be combined to form said virtual path (SPVC or SVC between 20 and 22 per Fig 1)

Receiving a frame, at said second switching node (22 or second switching node receives a frame with SVPC or SVC per Fig 1 or Abstract or col. 1 line 15) wherein said frame has an identifier corresponding to said virtual path (It would have been obvious to one of ordinary skill in the art at the time of the invention that an SVC or SVPC identifier would have had to be sent in order for the invention to work)

Forwarding said frame, utilizing said second switching node, to a destination determined based said two or more virtual circuits specified in said first control message 22 or 2<sup>nd</sup> node forwards the frame to 12 per Fig 1)

Art Unit: 2661

Cherukuri does not expressly call for: specifying two or more virtual circuits to be combined to form said virtual path or a frame has an identifier corresponding to said virtual path but teaches a SVC or SPVC per Fig 1.

Lorrain teaches: specifying two or more virtual circuits to be combined to form said virtual path (S6 per Fig 2 or col. 6 line 33-col. 8 line 27 or Abstract) and a frame has an identifier corresponding to said virtual path ("SSVC" or frame identifier per Fig 5)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add specifying two or more virtual circuits to be combined to form said virtual path and SVC identifier of Cherukuri in order to increase link bandwidth occupation per Lorrain per col. 2 line 63-col. 3 line 29.

Referring to **Claim 11**, Cherukuri teaches: A system of establishing a virtual path within a frame relay (Fig 1)

A frame relay network including a plurality of virtual circuits for transmitting frames from a first switching node to a second switching node (20 or first switching node transmitting frames to 22 or second switching node including SPVC or SVC or virtual circuit per Fig 1)

A virtual path established by a first control message transmitted by said first switching node to said second switching node (20 or first switching node establishes a virtual path to 22 or second switching node per Fig 1 utilizing a control message per col. 3 line 39-col. 6 line 44 or Table 3) and specifying two or more virtual circuits to be combined to form said virtual path (Fig 1)

A frame, having an identifier corresponding to said defined virtual path (It would have been obvious to one of ordinary skill in the art at the time of the invention that an SVC or SVPC identifier would have had to been sent in order for the invention to work), received by said second switching node and then forward said frame to a destination determined by said two or more virtual circuits specified in said control message (22 or 2<sup>nd</sup> node forwards the frame to 12 per Fig 1)

Cherukuri does not expressly call for: specifying two or more virtual circuits to be combined to form said virtual path or a frame has an identifier corresponding to said virtual path but teaches a SVC or SPVC per Fig 1.

Lorrain teaches: specifying two or more virtual circuits to be combined to form said virtual path (S6 per Fig 2 or col. 6 line 33-col. 8 line 27 or Abstract) and a frame has an identifier corresponding to said virtual path ("SSVC" or frame identifier per Fig 5)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add specifying two or more virtual circuits to be combined to form said virtual path and SVC identifier of Cherukuri in order to increase link bandwidth occupation per Lorrain per col. 2 line 63-col. 3 line 29.

**In Addition Dependent Claim limitations taught by Cherukuri:**

Art Unit: 2661

Regarding **Claims 2 & 12**, wherein said control message includes a data link connection identifier corresponding to a predetermined value, for identifying said purpose of first control message (col. 1 line 15-col. 2 line 10)

Regarding **Claims 5 & 15**, further comprising the step of: transmitting by said second switching node to said first switching node (22 or second switching node to 20 of first switching node per Fig 1), a second control message conveying acknowledgement of said request to establish said virtual path (Activate received or acknowledgement per Table 3 or col. 3 line 39-col. 6 line 44) or rejection of said request to establish said virtual path (Deactivate received or rejection per Table 3 or col. 3 line 39-col. 6 line 44)

Regarding **Claims 6 & 16**, transmitting to said first switching node to said second switching node (transmitting from 20 of first switching node to 22 or second switching node per Fig 1), a third control message acknowledging a reception of said second control message by said first switching node (Activate received or acknowledgment or third control message per Table 3 or col. 3 line 39-col. 6 line 44)

Regarding **Claims 7 & 17**, further comprising the step of: starting a timeout timer, by said first switching node, when said first control message is transmitted (Figs 4-8)

Detecting an error when said timeout timer expires prior to receiving a second control message from said second switching node, wherein said second control message conveys acknowledgement of said request to establish said virtual path or rejection of said request to establish said virtual path (Figs 4-8)

Regarding **Claims 8 & 18**, transmitting to said second switching node, a forth control message, sent by said first switching network, for removing one of said two or more virtual circuits from said virtual path (deactivate pending or deactivate receiver or control message for canceling said virtual path per Table 3 or Abstract)

Regarding **Claims 9 & 19**, further comprising the step of :

Transmitting to said second switching (22 per Fig 1 or second switch) a fifth control message, sent by said first switching network , for canceling said virtual path (deactivate pending or deactivate receiver or control message for canceling said virtual path per Table 3 or Abstract)

**In Addition Dependent Claim limitations taught by Lorrain:**

Regarding **Claims 3 & 13**, wherein said step of transmitting said first control message includes the step of transmitting a field for identifying each of said two or more said virtual circuits. (SSVC or identifier for two or more virtual circuits per Fig 5 or S6 per Fig 2 or col. 6 line 33-col. 8 line 27 or Abstract)

Art Unit: 2661

### **Claim Objections**

**4.0**     **Claims 4, 8, 20, & 20** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Claim Objections***

**5.0**     Claims 8, 10, 18, & 29 are objected to because of the following informalities: "fourth" is misspelled as "forth". Appropriate correction is required.

### ***Conclusion***

**6.0**     The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

St-Amand et. al.; US Patent No.: 6,526, 063 B1 dated February 25, 2003 in which he discloses conversion of Frame Relay Network with an ATM backbone that utilizes control messages to set up VCs over the backbone.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert W Wilson whose telephone number is 703/305-4102. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Olms can be reached on (703) 305-4703. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Art Unit: 2661

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.



Robert W Wilson

Examiner

Art Unit 2661

RWW

March 17, 2004



DANSTON  
PATENT EXAMINER